

FILED UNDER SEAL PURSUANT TO PROTECTIVE ORDER

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

PERSONALIZED MEDIA COMMUNICATIONS, LLC Plaintiff, v.	
GOOGLE LLC. Defendant.	Case No.: 2:19-cv-90-JRG

**PMC'S OPPOSITION TO GOOGLE'S MOTION FOR SUMMARY JUDGMENT
ON THE BASIS THAT THE ASSERTED CLAIMS OF U.S. PATENT NOS. 8,601,528
AND 8,739,241 ARE NOT PATENT-ELIGIBLE UNDER 35 U.S.C. § 101**

FILED UNDER SEAL PURSUANT TO PROTECTIVE ORDER

TABLE OF CONTENTS

I.	RESPONSE TO STATEMENT OF ISSUES	2
II.	RESPONSE TO STATEMENT OF UNDISPUTED MATERIAL FACTS	3
A.	The '528 Patent	3
B.	The '241 Patent	4
III.	THE <i>ALICE</i> FRAMEWORK IN THE SUMMARY JUDGMENT CONTEXT	5
A.	<i>Alice</i> – Step One.....	5
B.	<i>Alice</i> – Step Two	7
C.	Burden of Proof and Summary Judgment Standard	8
	ARGUMENT	9
A.	Google’s Cursory Treatment of The Claims Warrants Denial of the Motion9	
B.	Google Is Not Entitled to Summary Judgment as to the '528 Patent	10
i.	<i>Alice</i> – Step One.....	10
ii.	<i>Alice</i> – Step Two	13
iii.	Google’s “Other Asserted '528 Patent Claims” Challenge is Deficient.....	15
C.	Google Is Not Entitled to Summary Judgment as to the '241 Patent	16
i.	<i>Alice</i> – Step One.....	17
ii.	<i>Alice</i> – Step Two	20
iii.	Google Is Not Entitled to Summary Judgment on the “Other Asserted '241 Patent Claims”	22
	CONCLUSION.....	22

FILED UNDER SEAL PURSUANT TO PROTECTIVE ORDER

TABLE OF AUTHORITIES

	Page(s)
Cases	
<i>Affinity Labs of Tex., LLC v. DIRECTV, LLC</i> , 838 F.3d 1253 (Fed. Cir. 2016).....	19
<i>Alice Corp. Pty. Ltd. v. CLS Bank Int’l</i> , 134 S. Ct. 2347 (2014).....	<i>passim</i>
<i>Bascom Glob. Internet Servs., Inc. v. AT&T Mobility LLC</i> , 827 F.3d 1341 (Fed. Cir. 2016).....	7, 14, 21
<i>Berkheimer v. HP Inc.</i> , 881 F.3d 1360 (Fed. Cir. 2018).....	<i>passim</i>
<i>Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc.</i> , 880 F.3d 1356 (Fed. Cir. 2018).....	<i>passim</i>
<i>Digitech Image Techs., LLC v. Elecs. for Imaging, Inc.</i> , 758 F.3d 1344 (Fed. Cir. 2014).....	19
<i>Elec. Power Grp., LLC v. Alstom S.A.</i> , 830 F.3d 1350 (Fed. Cir. 2016).....	19
<i>Enfish, LLC v. Microsoft Corp.</i> , 822 F.3d 1327 (Fed. Cir. 2016).....	6, 10, 20
<i>Exergen Corp. v. Kaz USA, Inc.</i> , 2015 WL 8082402 (D. Mass. Dec. 7, 2015).....	10
<i>In re TLI Commc’ns LLC Patent Litig.</i> , 823 F.3d 607 (Fed. Cir. 2016).....	19
<i>McRO, Inc. v. Bandai Namco Games Am. Inc.</i> , 837 F.3d 1299 (Fed. Cir. 2016).....	6
<i>Miller v. Dep’t of Justice</i> , 842 F.3d 1252 (Fed. Cir. 2016).....	8
<i>Personalized Media Commc’ns, LLC v. Amazon.com, Inc.</i> , 161 F. Supp. 3d 333 (D. Del. 2015).....	19
<i>Personalized Media Commc’ns, LLC v. Apple Inc.</i> , 2016 WL 5719701 (E.D. Tex. Sept. 13, 2016).....	1, 13, 17

FILED UNDER SEAL PURSUANT TO PROTECTIVE ORDER

<i>Personalized Media Commc'ns, LLC v. Funai Elec. Co.</i> , 2017 WL 957719 (E.D. Tex. Feb. 22, 2017)	1, 17
<i>Personalized Media Commc'ns, LLC v. Samsung Elecs. Am., Inc.</i> , 2016 WL 9240544 (E.D. Tex. Sept. 21, 2016)	1, 17
<i>PPS Data, LLC v. Jack Henry & Assocs., Inc.</i> , 404 F. Supp. 3d 1021 (E.D. Tex. 2019)	<i>passim</i>
<i>RF Delaware, Inc. v. Pacific Keystone Technologies, Inc.</i> , 326 F.3d 1255 (Fed. Cir. 2003)	9
<i>Two-Way Media v. Comcast Cable Commc'ns, LLC</i> , 874 F.3d 1329 (2017)	19
<i>Ultramercial, Inc. v. Hulu, LLC</i> , 722 F.3d 1335 (Fed. Cir. 2013), <i>vacated on other grounds</i> , 134 S. Ct. 2870 (2014)	9
<i>Uniloc USA, Inc. v. LG Electronics USA, Inc.</i> , 957 F.3d 1303 (Fed. Cir. 2020)	<i>passim</i>
Statutes	
35 U.S.C. § 101	<i>passim</i>

FILED UNDER SEAL PURSUANT TO PROTECTIVE ORDER

Google’s argument that two of the four patents asserted in this case (the ’528 and ’241) are patent ineligible should be rejected. This Court, in three prior cases, has already rejected various defendants’ efforts to invalidate PMC’s patents on § 101 grounds,¹ and the fourth time is not the charm for Google. PMC’s patents are addressed to novel multimedia signal processing techniques for the remote control of equipment and the coordination of video content. These patents claim priority to the 1980s—the age of console TVs and rabbit-ear antennas—when the techniques were plainly not “routine,” “conventional,” or “well-understood,” all facts Google must prove by clear and convincing evidence. *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018).

Google’s motion is an instruction manual for litigants on what not to do with respect to Section 101 challenges. Contrary to the teachings of the Supreme Court and Federal Circuit, Google ignores the language and context of the claims, cherry-picks the specification and expert testimony to omit evidence of technological improvements that the claims addressed, and strains to come up with ill-fitting analogies to try to gin up an abstract concept for patents that plainly disclose improvements in a specific technological setting. For example, at Step One of the 101 inquiry, Google compares one of the patents to fast-forwarding a cassette tape on a VCR and says the other could be carried out through phone calls from one person to another. Review of the actual claims—not the clunky analogies offered by Google—shows that they are directed to specific technological improvements, including methods of generating and using control signals associated

¹ See *Personalized Media Commc’ns, LLC v. Funai Elec. Co.*, 2017 WL 957719 (E.D. Tex. Feb. 22, 2017), *report and recommendation adopted*, 2017 WL 951860 (E.D. Tex. Mar. 10, 2017) (“Funai”); *Personalized Media Commc’ns, LLC v. Samsung Elecs. Am., Inc.*, 2016 WL 9240544 (E.D. Tex. Sept. 21, 2016), *report and recommendation adopted*, 2016 WL 9274742 (E.D. Tex. Sept. 29, 2016) (“Samsung”); *Personalized Media Commc’ns, LLC v. Apple Inc.*, 2016 WL 5719701 (E.D. Tex. Sept. 13, 2016), *report and recommendation adopted*, 2016 WL 5475798 (E.D. Tex. Sept. 29, 2016) (“Apple”).

FILED UNDER SEAL PURSUANT TO PROTECTIVE ORDER

with television programming to detect incomplete television images and skip over them automatically ('528) and methods of generating and using control signals within a multi-tier distribution network to establish network control in the television programming distribution process ('241).

Step Two, which asks the factual question “whether a claim element or combination of elements is well-understood, routine and conventional to a skilled artisan in the relevant field,” is also fatal to Google’s motion. *Berkheimer*, 881 F.3d at 1368. Google ignores *Berkheimer* altogether, but that decision makes clear that the non-conventional nature of the claims is measured against the state of the art at the time of the patents’ priority dates—here, the 1980s. Google fails to “completely foreclose any material factual disputes” about whether the claim elements in combination were well-understood, routine, and conventional, and overlooks evidence to the contrary supplied by the patent specification, the claims themselves, and PMC’s experts. *PPS Data, LLC v. Jack Henry & Assocs., Inc.*, 404 F. Supp. 3d 1021, 1039 (E.D. Tex. 2019). Its motion should therefore be denied.

I. RESPONSE TO STATEMENT OF ISSUES

Genuine issues of material fact exist as to whether the asserted claims of the '528² and '241³ are patent-eligible under § 101. Alternatively, this Court may declare those patents to be patent-eligible at this stage of the proceedings.

² Ex. 1. All exhibits cited are attached to the Declaration of Tamar Lusztig, filed herewith.

³ Ex. 2.

FILED UNDER SEAL PURSUANT TO PROTECTIVE ORDER

II. RESPONSE TO STATEMENT OF UNDISPUTED MATERIAL FACTS**A. The '528 Patent**

Paragraph 4 asserts that Claim 32 of the '528 has “substantially similar limitations” as Claim 21. Not true. The method taught in Claim 21 is performed by “determining the absence of complete generated television image data by processing information at least one of included in and received with said television signal” and “determining a location of subsequent information for advancing to based on said step of determining the absence of complete generated television image data,” and ensures the incomplete image data is not displayed. Claim 32, on the other hand, provides a method for “generating at least one control signal; and transmitting at least one control signal” that receivers process in order to identify incomplete video data.

The assertion in ¶ 6 is misleading. The “examples” provided are merely examples of a tuner, microcomputer system, and television monitor that could conform to Figure One of the patent. Ex. 1, '528 10:42-11:24. They do not suggest that the asserted claims “were well known to those of ordinary skill in the art or otherwise conventional in 1987.” Indeed, the '528 patent discloses that the invention was not conventional, for example, by disclosing that the prior art in 1987 had “no capacity for operating on the basis of control signals transmitted to recorder/players at a plurality of subscriber stations.” '528 5:25-27; *see also id.* 1:57-60.

Paragraph 7 mischaracterizes the testimony of Dr. Russ. In fact, each citation includes testimony by Dr. Russ that the asserted claims were innovative and were *not* conventional, which Google ignores. For example, page 87 of Dr. Russ’s deposition transcript states in part: “Q: Mr. Harvey and Mr. Cuddihy did not invent cable or broadcast television either, right? A: They did not invent cable broadcast television, *but they arranged other things in combination with cable and broadcast television to create inventive concepts.*” Ex. 3, Russ Tr. 87:11-17 (emphasis added).

FILED UNDER SEAL PURSUANT TO PROTECTIVE ORDER

Indeed, every piece of testimony Google cites for the proposition that PMC has admitted that claimed elements of the '528 patent were conventional is accompanied by testimony from Dr. Russ that the claims were innovative and not conventional.⁴ Paragraph 7 also ignores Dr. Russ's report, which states that "the claims of the '528 Patent were inventive and well beyond the capabilities of a conventional receiver station in the late 1980s." Ex. 4, Russ Rep. ¶ 821; *see id.* ¶ 815.

PMC disputes ¶ 8 to the extent it suggests that Media Source Extensions is the only instrumentality alleged to be infringing the '528 asserted claims. PMC's infringement contentions for the '528 patent are set out fully in Appendix C to PMC's infringement report. *See* Ex. 5.

B. The '241 Patent

Paragraph 10 misstates the claims at issue. The independent asserted claims of the '241 are Claims 22 and 30. The current dependent asserted claims of the '241 are 23, 31, 33, 34, 36, 37, 39. *See* Ex. 6, Xiong Rep. App'x D.

Paragraph 11 of Google's statement asserts that claim 30 of the '241 patent has "similar limitations" as Claim 22. Not so. The method taught in claim 30 is performed using multiple additional steps not included in Claim 22, including the use of a "controllable device" at the receiver station to respond to the transferred signal, and does not include ultimate output in a multimedia presentation.

Paragraph 13 is misleading. It omits the relevant timeframe, which is 1981. And none of Google's quoted language suggests that the claimed elements of the patent "were well known to those of ordinary skill in the art or otherwise conventional." The opposite is true: the '241 discloses that the invention was not conventional because, for example, "[i]n the prior art, there have been

⁴ *See* Russ Tr. 87:3-17, 91:7-13, 92:17-93:2, 107:18-24, 140:20-141:1, 149:23-151:6, 153:4-10, 164:19-165:1, 168:23-169:3, 169:4-14.

FILED UNDER SEAL PURSUANT TO PROTECTIVE ORDER

attempts to develop systems to control programming and systems to monitor programming, but the two have been treated as separate systems, and each has had limited capacity.” Ex. 7, ’490 1:53-57.⁵ The ’241 also discloses that “prior art systems and equipment have lacked the capacity to automatically coordinate multi-channel and multi-media presentations.” ’490 2:22-25.

Paragraph 14 mischaracterizes the testimony of Dr. Russ. As is true of ¶ 7, each citation to testimony about what Google says the named inventors “did not invent” includes testimony by Dr. Russ that the asserted claims were innovative and were *not* conventional.⁶ Google likewise ignores Dr. Russ’s opinions that the asserted claims of the ’241 patent “were inventive well beyond the capabilities of conventional origination stations, intermediate transmitter stations, and receiver stations in the early 1980s.” Russ Rep. ¶ 831; *see id.* ¶ 828.

PMC disputes ¶ 15 to the extent it oversimplifies PMC’s infringement contentions. PMC’s contentions are set out fully in Appendix D to the Xiong Report.

III. THE *ALICE* FRAMEWORK IN THE SUMMARY JUDGMENT CONTEXT

A. *Alice* – Step One

Alice warns courts to “tread carefully in construing [§ 101’s] exclusionary principle lest it swallow all of patent law,” since “[a]t some level, all inventions embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.” *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2354 (2014) (alterations and quotation marks omitted). Step One of the *Alice* framework therefore asks “whether the claims . . . focus on a specific means or method that improves the relevant technology”—in which case they are not ineligible under § 101—“or are

⁵ The 1981 parent application for the asserted patents.

⁶ *See* Russ Tr. 87:3-17, 91:7-13, 92:17-93:2, 107:18-24, 140:20-141:1, 149:23-151:6, 153:4-10, 164:19-165:1, 168:23-169:3, 169:4-14.

FILED UNDER SEAL PURSUANT TO PROTECTIVE ORDER

instead directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery.” *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314 (Fed. Cir. 2016). That the claims merely “involve” or “implicate” some abstract concept does not render them “directed to” an abstract idea. *Id.*

Instead, in determining whether a claim is “directed to” something other than an abstract concept, the Federal Circuit looks to whether the claim as a whole discloses a specific improvement to prior systems. *See Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1336 (Fed. Cir. 2016) (claims were directed to “a specific improvement to the way computers operate”); *Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc.*, 880 F.3d 1356, 1363 (Fed. Cir. 2018) (claims at issue, though they involved “the generic idea of summarizing information,” were “directed to a particular manner of summarizing and presenting information in electronic devices” and therefore “recite a specific improvement over prior systems”). The Federal Circuit has further clarified the “improvement over prior systems” standard in recent cases.

For example, in *Uniloc USA, Inc. v. LG Electronics USA, Inc.*, the court explained that a claim is not unacceptably abstract under Step One merely because it involves a technology that existed in the prior art. 957 F.3d 1303 (Fed. Cir. 2020). The *Uniloc* court clarified that “data manipulation” claims held ineligible in prior cases were deemed abstract because they *only* “recited a series of abstract steps . . . using ‘results-based functional language’ without the means for achieving any purported technological improvement.” *Id.* at 1308. By contrast, the claims at issue—although they contained “results-oriented” words—were patentable because they were directed to an improvement, by including steps such as “adding to each inquiry message prior to transmission an additional data field for polling at least one secondary station.” *Id.* at 1308 (quotation marks omitted). Because that portion of the claims “results in reduced response time by

FILED UNDER SEAL PURSUANT TO PROTECTIVE ORDER

peripheral devices,” the court found that the claims “are directed to a specific asserted improvement to the functionality of the communication system itself.” *Id.* at 1308, 1309. That was true even though the specific technology (Bluetooth) was not identified in the claim language and already existed in the prior art, and even though the claims did not “expressly mention” the specific improvement. *Id.* at 1309. Regardless of the language used, a claim is patent eligible under Step One if there is an identifiable “improvement to functionality.” *Id.*

B. Alice – Step Two

Only if an invention is determined to be directed to an abstract concept under Step One does a court reach Step Two, where the question is whether the claim limitations nevertheless contain an inventive concept that “involve[s] more than performance of well-understood, routine, and conventional activities previously known to the industry.” *Berkheimer*, 881 F.3d at 1367. “Only ‘when there is no genuine issue of material fact regarding whether the claim element or claimed combination is well-understood, routine, and conventional to a skilled artisan in the relevant field’ can eligibility ‘be decided on summary judgment as a matter of law.’” *PPS Data*, 404 F. Supp. 3d at 1040 (quoting *Berkheimer*, 881 F.3d at 1368) (alterations omitted).

The question whether “something is well-understood, routine, and conventional goes beyond what was simply known in the prior art. The mere fact that something is disclosed in a piece of prior art, for example, does not mean it was well-understood, routine, and conventional.” *Berkheimer*, 881 F.3d at 1369. Indeed, Step Two is satisfied if individual claim elements or a combination of elements result in a “non-conventional and non-generic arrangement of known, conventional pieces.” *Bascom Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1350 (Fed. Cir. 2016). Thus, for example, this Court recently found that claims at issue were directed to the abstract idea of the “electronic check deposit processing.” *PPS Data*, 404 F. Supp.

FILED UNDER SEAL PURSUANT TO PROTECTIVE ORDER

3d at 1039. But at Step Two, the Court concluded that the “bypass limitation” included in the claims altered the “routine and conventional sequence of events” and provided an inventive benefit to banks. *Id.* at 1042-43. The Court further concluded, relying on descriptions in the specification, that the “ordered combination of elements in the Asserted Claims was unconventional in the prior art.” *Id.* at 1043. Summary judgment was therefore precluded. *See id.* 1043-44.

The ultimate question at Step Two is whether, in light of all the facts presented, the claimed invention is “well-understood, routine and conventional to a skilled artisan at the time of the patent.” *Berkheimer*, 881 F.3d at 1369. That inquiry is factual in nature, and the Federal Circuit “routinely relies on factual assertions in patent specifications” as evidence of inventiveness. *PPS Data*, 404 F. Supp. 3d at 1040 (citation omitted). “[F]actual claims in the specification” are enough to create a factual dispute sufficient to preclude summary judgment, including because such statements “are particularly likely to be scrutinized for accuracy by the USPTO.” *Id.* at 1041.

C. Burden of Proof and Summary Judgment Standard

The defense of patent ineligibility under § 101 is Google’s to prove by clear and convincing evidence. *See Berkheimer*, 881 F.3d at 1368; *PPS Data*, 404 F. Supp. 3d at 1040 (“As with any other invalidity defense, the defendant must prove that a patent is invalid for claiming patent-ineligible subject matter by clear and convincing evidence.”). Clear and convincing evidence is “evidence which produces in the mind of the trier of fact an abiding conviction that the truth of a factual contention is highly probable.” *Miller v. Dep’t of Justice*, 842 F.3d 1252, 1257-58 (Fed. Cir. 2016) (quotation marks omitted). As this Court recognized recently, this means the question of invalidity can only be resolved in Google’s favor on summary judgment if, viewing the evidence in the light most favorable to PMC, Google can “completely foreclose any material factual disputes about either the ‘abiding’ or ‘highly probable’ nature of its allegations.” *PPS Data*, 404 F. Supp.

FILED UNDER SEAL PURSUANT TO PROTECTIVE ORDER

3d at 1039. If PMC “can offer evidence which creates some uncertainty about the truth of [Google’s] allegations,” or “which has the potential to reduce [Google’s] contentions from ‘highly probable’ to any lesser level of probability,” summary judgment must be denied. *Id.* at 1038.

Although eligibility is a question of law, the *Alice* analysis “is rife with underlying factual issues,” *Ultramercial, Inc. v. Hulu, LLC*, 722 F.3d 1335, 1339 (Fed. Cir. 2013), *vacated on other grounds*, 134 S. Ct. 2870 (2014), including the entirety of the Step Two conventionality inquiry, *see Berkheimer*, 882 F.3d at 1368. Thus, to succeed on its motion, Google must establish that the patents are directed to ineligible abstract ideas and, viewing all evidence in the light most favorable to PMC, must “completely foreclose any material factual disputes” about its allegation that the claims contained no inventive concepts as of their effective filing dates in the 1980s. *PPS Data*, 404 F. Supp. 3d at 1039.

ARGUMENT

A. Google’s Cursory Treatment of The Claims Warrants Denial of the Motion

Google’s motion should be denied because it has failed to establish that the twenty asserted claims in the ’528 and ’241 patents do not meet the *Alice* standard. Instead, Google has cherry-picked one claim from each of the patents and accorded them cursory treatment. Google asserts that these two claims are “representative” of other claims, but offers no analysis as to why the two are equivalent in scope with the other claims and ignores material differences among them.

Because “each claim in a patent is presumptively different in scope,” *RF Delaware, Inc. v. Pacific Keystone Technologies, Inc.*, it is Google, not PMC, who must explain why Google’s two selected claims are truly representative of all twenty of the asserted claims. 326 F.3d 1255, 1263 (Fed. Cir. 2003). Google fails to meet that burden, spending a grand total of two footnotes on the topic. Its motion therefore “amounts to an impermissible bypass of the required claim-by-claim

FILED UNDER SEAL PURSUANT TO PROTECTIVE ORDER

analysis. . . . Moreover, [Google’s] position runs counter to the codified presumption that each claim of a patent (whether independent, dependent, or multiple dependent form) shall be presumed valid independently of the validity of other claims.” *Exergen Corp. v. Kaz USA, Inc.*, 2015 WL 8082402, at *5 (D. Mass. Dec. 7, 2015).

B. Google Is Not Entitled to Summary Judgment as to the ’528 Patent

The ’528 claims are addressed to a specific problem of processor-enabled television receiver stations in a network. Stations have different processing capabilities, creating the need for a solution to handle situations in which a station does not have a generated video image ready in time for presentation. To address this problem, Claim 21 of the Patent teaches a “method of controlling the display of television programming at a receiver station” by “determining the absence of complete generated television image data by processing information at least one of included in and received with said television signal” and “determining a location of subsequent information for advancing to based on said step of determining the absence of complete generated television image data,” and ensuring the incomplete image data is not displayed. Prior to the ’528, television receiver stations were unable to skip over incomplete video data, resulting in partial display, errors, or glitches for users. The ’528 therefore represented a significant advancement over conventional technology systems of the time. *See* Russ Rep. ¶ 815.

i. Alice – Step One

Google resorts to ignoring claim limitations and oversimplifying the claims in order to argue that the ’528 is directed to an abstract idea. Case after case makes clear that eligibility determinations require Google to engage with the steps of the claim language, not a reconstructed overgeneralization. *See Enfish*, 822 F.3d at 1337 (“However, describing the claims at such a high level of abstraction and untethered from the language of the claims all but ensures that the

FILED UNDER SEAL PURSUANT TO PROTECTIVE ORDER

exceptions to § 101 swallow the rule.”); *Core Wireless*, 880 F.3d at 1361 (“[A]t step one, we must articulate what the claims are directed to with enough specificity to ensure the step one inquiry is meaningful.”).

Without engaging with the specific steps of Claim 21, Google announces that it is just like “a person manually operating a VCR who determines that part of a cassette tape is blank and, on that basis, decides to fast forward past the missing video to a point where the video resumes,” rendering Claim 21 abstract. Mot. at 11. First of all, the analogy is ludicrous. Claim 21 is not “directed to” the concept of manually pressing a “fast forward” button to move past blank parts in an analog cassette tape. Rather, it discloses a specific way to use control signals to detect and process incomplete television images from an incoming transmission, and to prevent the display of those incomplete images in order to seamlessly provide the viewer with an unbroken viewing experience. If a user is viewing tape with blank portions, the user will *see* a black screen and other indicia of missing information. There is no detecting, preventing the output, or determining a subsequent location to which to advance. The ’528 is not about automating jumping over the blank portion of a cassette tape, it is detecting—indeed, *anticipating*—a future “blank” before it occurs and ensuring the end user never knows it is there. In addition to overlooking the preventative nature of the invention, Google’s analogy also fails to account for the fact that the claim is limited to processing information “*included in and received with*” the “television signal.” ’528 287:20 (emphasis added). *Seeing* a blank screen and choosing to skip over that portion of a tape is not the same as a computer processing digital information tied to a corresponding image before the image is intended to be shown, recognizing incomplete images from the corresponding data, and excising the incomplete image from those images displayed to the user.

Google also represents that PMC’s claim constructions were *so broad* that PMC’s expert

FILED UNDER SEAL PURSUANT TO PROTECTIVE ORDER

“testified that he was unsure what exactly this claim language required.” Mot. at 11-12. There’s a reason Google does not offer direct quotations from the deposition—because Dr. Russ never said anything of the sort. Instead, the cited testimony shows Dr. Russ gave direct answers concerning the claim requirements. *See, e.g.*, Russ Tr. 189:11-15 (“ Q. Okay. But sitting here today, you can’t tell me exactly what you mean by ‘spatially subsequent’ with regard to that claim term? A. Located at a different location.”).

Google wrongly argues that the ’528 must be abstract because the invention is “platform agnostic” and not limited to “broadcast television transmissions.” Mot. at 11. But if that view were correct, the Federal Circuit would not have held the claims in *Uniloc* patent-eligible. *Uniloc*, 957 F.3d 1303. While the invention in *Uniloc* was originally intended for use in a Bluetooth system, the claim language was platform agnostic: “A primary station for use in a **communications system** comprising at least one secondary station” *Id.* at 1305 (emphasis added). According to Google’s reasoning, because the claims could apply to embodiments outside the Bluetooth system, those claims should have been held impermissibly abstract. Instead, the Federal Circuit held that the claims were “sufficient to pass muster under *Alice* step one.” *Id.* at 1309. The fact that Claim 21 is not limited to broadcast television and may instead be implemented in other systems does not render it abstract.

The Federal Circuit in the past several years has emphasized that claims involving “the generic idea of” some action can still satisfy Step One as a “specific improvement over prior systems” if the claims are “directed to a *particular manner* of” taking that generic action. *Core Wireless*, 880 F.3d at 1362-63 (emphasis added). That is true of the ’528, which is directed to a “particular manner” of detecting missing media information and skipping ahead to displayable information. For example, Claim 32 recites “transmitting from a transmitter station an information

FILED UNDER SEAL PURSUANT TO PROTECTIVE ORDER

transmission including a television signal” and “generating at least one control signal” to be sent with the television signal to enable the receiver to “determine the absence of complete generated television image data by processing” that control signal, and in turn omit the portion of the signal with missing media. Like the patent in *Core Wireless*, the ’528 limitations “disclose a specific manner of [skipping and not] displaying a limited set of information to the user.” And that specific manner was a significant “improvement[] over prior art systems and methods.” Russ Rep. ¶ 812; *see id.* ¶ 815 (“[The ’528] claim elements are also not abstract because conventional receiver stations were not capable of performing these steps. Conventional receiver stations would simply receive and output television.”).

In fact, the ’528 is similar to PMC’s ’635 patent at issue in *Apple*. There, the court “found that claim 1 [of the ’635] is directed to using a ‘control signal’ associated with ‘digital programming’ to ‘decrypt programming’ ‘based on’ the ‘control signal.’” 2016 WL 5719701, at *5. Relying on the claim language and the specification, the court determined “that using a ‘control signal’ to control decryption improves the way in which ‘encrypted digital programming’ is delivered,” and was therefore “not directed to an abstract idea under step one[.]” *Id.* The same conclusion applies as to Claim 32 of the ’528, which calls for using a “control signal” associated with “television programming” to detect and skip an “incomplete television image” “based on” the “control signal.” As was true of the ’635 claims, “using a ‘control signal’ to control [detection of incomplete images] improves the way in which ‘[television] programming’ is delivered,” and is therefore “not directed to an abstract idea under step one[.]” *Id.*

ii. Alice – Step Two

On Step Two, Google is required to show that the ’528 claims—individually and as an ordered combination—were well-understood, routine, and conventional to a skilled artisan at the

FILED UNDER SEAL PURSUANT TO PROTECTIVE ORDER

time of the patent.” *Berkheimer*, 881 F.3d at 1369; *see also Bascom*, 827 F.3d at 1350 (holding claims directed to abstract ideas are patentable if they result in a “non-conventional and non-generic arrangement of known, conventional pieces”). Google, however, pays lip service to its burden by discussing only the alleged conventional nature of certain elements utilized in the claim, without addressing the elements together as an ordered combination. Mot. at 13-14 (analyzing only “a monitor,” “a receiver,” “memory,” and “a processor”). Google also ignores the fact that the Step Two inquiry is conducted from the perspective of someone in **1987**. Google has fallen far short of its burden on summary judgment to “completely foreclose any material factual disputes” regarding whether the ’528 was well-understood, routine, and conventional to a skilled artisan in 1987. *PPS Data*, 404 F. Supp. 3d at 1039.

In contrast, PMC’s expert expressly opined that the “claims of the ’528 Patent were inventive and well beyond the capabilities of a conventional receiver station in the late 1980s.” Russ Rep. ¶ 821. Dr. Russ further explained, “Conventional receiver stations were not able to detect errors, such as determining the absence of complete generated television image data, nor were they able to advance past the error in the transmission. Conventional receiver stations were also not able to prevent the display of incomplete television programming images.” *Id.* ¶ 815.

The Federal Circuit in *Berkheimer* reversed the grant of summary judgment on similar facts. In so doing, the Federal Circuit emphasized the wide-ranging factual nature of the Step Two inquiry, observing that it “goes beyond what was simply known in the prior art,” because “the mere fact that something is disclosed in a piece of prior art, for example, does not mean it was well-understood, routine, or conventional.” *Berkheimer*, 881 F.3d at 1368. The court also noted the inquiry “might sometimes overlap with other fact-intensive inquiries like novelty.” *Id.* (quotation marks omitted). The defendant there challenged the eligibility of a patent directed to a

FILED UNDER SEAL PURSUANT TO PROTECTIVE ORDER

process of limiting redundancies in information entered into a database. While the court agreed the subject matter was abstract, it determined there was a fact issue under Step Two precluding summary judgment. *See id.* at 1367-68. The court noted: “[T]he specification states that storing object structures in the archive without substantial redundancy improves system operating efficiency and reduces storage costs. It also states that known asset management systems did not archive documents in this manner.” *Id.* at 1370. By identifying evidence of a benefit of the invention and the fact that the invention was not previously known, the plaintiff created a fact issue on Step Two sufficient to preclude summary judgment. *See id.* (“[T]here is at least a genuine issue of material fact in light of the specification regarding whether claims 4-7 archive documents in an inventive manner that improves these aspects of the disclosed archival system.”). Here, the evidence shows that prior to the ’528, the “conventional receiver stations would simply display the transmission as receiver, with errors.” Russ Rep. ¶ 815. Summary judgment is therefore improper.

iii. Google’s “Other Asserted ’528 Patent Claims” Challenge is Deficient

In a single paragraph, Google challenges **ten** other claims in the ’528. Google’s argument depends on Claim 21 being ineligible, which it is not. But even if it were, Google’s shallow analysis wholly fails to address either step of the *Alice* framework. Google identifies no judgment evidence suggesting that these claims were well-understood, routine, and conventional in 1987 and thus cannot carry its Step Two burden. Moreover, Google highlights only a handful of limitations and—yet again—considers them only individually, rather than as an ordered combination with Claim 21. And Google outright ignores claim elements, including the use in Claim 32 of “at least one control signal” to enable a receiver to “determine the absence of complete” image. Google is entirely silent on why the generation and transmission of control

FILED UNDER SEAL PURSUANT TO PROTECTIVE ORDER

signals in conjunction with television signals was not a specific improvement, or was well-understood, routine, and conventional in 1987.

C. Google Is Not Entitled to Summary Judgment as to the '241 Patent

Google contends the '241 is “directed to the abstract idea of transmitting signals with television programming.” Mot. at 15-16. That description does not capture the character of the claim as a whole, which, among other things, includes storing identification information that is compared to received signals; conditionally transmitting from an intermediate transmitter station; and controlling the receiver station on the basis of signals originally transmitted. Only by oversimplifying the '241 invention and ignoring claim language and expert testimony can Google reduce the invention to nothingness.

In fact, the '241 patent is directed to the specific problem of the control of intermediate transmitter stations and receiver stations in a multi-tier programming distribution network that includes an origination station to output television programming. *See* Russ Rep. ¶ 823. The '241 invention went beyond “automating conventional transmitter/receiver stations,” as Google describes it—rather, it claims a method for establishing a multi-tiered, distributed architecture utilizing intermediate transmitter stations and control signals used to control the distribution of content at different tiers in the architecture. The '241 provided not only a method of automating transmitter and receiver stations but also of establishing control over the entire content distribution network, which was not conventional when the patent was filed. Prior to the '241, conventional broadcast systems were inflexible and unable to control intermediate transmitter stations or receiver stations based on signals sent from an origination station. *See* Russ Rep. ¶ 781. Thus, the '241 invention, which dates back to 1981, represented a significant improvement to the functionality of a programming distribution network, including origination, intermediate

FILED UNDER SEAL PURSUANT TO PROTECTIVE ORDER

transmitter, and receiver stations. *See id.* ¶ 830. That Google ignores the extensive claim language setting forth this multi-tiered distribution system and reduces the patent just to “transmitting signals with television programming” is baffling.

Right off the bat, Google completely overlooks the fact that this Court has on three separate occasions rejected similar overgeneralizations of other patents in PMC’s portfolio, including ones involving the use of signals in television programming. *See Samsung*, 2016 WL 9240544, at *3-11 (rejecting § 101 challenges to six PMC patents and concluding, for example, that claim presented a “method of enabling a receiver station to identify ‘discrete signals’ encoded in ‘variable formats’ using ‘instruct signals’ in order to ‘deliver television programming’”) (alteration omitted); *see also Funai*, 2017 WL 957719, at *1 (rejecting argument that patents were directed to abstract concepts like “creating a coordinated presentation of information from different media,” and identifying a “specific technological problem” based on details of claim language sufficient to meet Step One); *Apple*, 2016 WL 5719701, at *9 (upholding claim consisting of seven-step process for “processing signals in a television receiver” against a § 101 challenge and concluding that patent was directed to “a method of using ‘control information’ from a ‘message stream’ to control the input of ‘digital television signals’ to two or more processors”).

i. Alice – Step One

Google removes all relevant detail from the invention and then calls the result “abstract.” Google offers no meaningful description of either the invention as a whole or any of its claims, but instead simply refers to it as “automating conventional transmitter/receiver stations.” Mot. at 16. Google even suggests that the method of Claim 22 could be performed by a human operator passing on messages over the phone, *id.* at 18 n.5, ignoring that PMC’s expert has opined that a human “cannot perform the steps of the ’241,” Russ Rep. ¶ 830.

FILED UNDER SEAL PURSUANT TO PROTECTIVE ORDER

Claim 22 does not simply describe the process of sending information from an origination station to a receiver. It describes a specific “method of controlling an intermediate transmitter station to communicate television programming to a receiver station” by transmitting television programming from an origination station to an intermediate transmitter station accompanied by “a first signal and a second signal,” which control various processing steps at the intermediate transmitter station and at the receiver station in the manner specified by the claim. The intermediate transmitter station “transmit[s] said television programming and said second signal” to a receiver station based a comparison of the first signal to “identification information” stored at the intermediate transmitter station. The television programming is then “output[] at said receiver station” based on the “control signal included in” the second signal. Thus, the claim at a minimum requires (1) two separate transmissions—one from the origination station and one from the intermediate transmitter station; (2) conditional transmission of television programming based on the comparison of received control signals; and (3) the execution of a receiver station function based on a control signal from an origination station. None of those requirements are captured by Google’s characterization.

Once described with “enough specificity to ensure the step one inquiry is meaningful,” it is clear that Claim 22 goes beyond the “generic idea” of transmitting programming through a distribution network but rather is “directed to a *particular manner*” of transmitting television programming and control signals to establish control of intermediate transmitter stations and receiver stations. *Core Wireless*, 880 F.3d at 1362 (emphasis added). “These limitations disclose a specific manner of” communicating television programming to a receiver station, and therefore “recite a specific improvement over prior systems” sufficient to meet Step One and eliminate any concerns about “monopolizing the building blocks of human ingenuity.” *Id.* at 1361, 1363. This

FILED UNDER SEAL PURSUANT TO PROTECTIVE ORDER

conclusion is bolstered by PMC’s expert Dr. Russ, who has opined that “the claims of the ’241 Patent provide a specific structure to the methods claimed therein, require hardware and software, and produce a specific presentation of multiple media received electronically, which was not conventional and is not disclosed in the prior art.” Russ Rep. ¶ 832; *see id.* ¶ 828 (listing ways in which the ’241 went beyond what was conventional for origination, intermediate transmitter, and receiver stations). Dr. Russ further clarified that the claims “are directed to a computer-based process that greatly improves the functionality of a programming distribution network, including its origination, intermediate transmitter, and receiver stations.” *Id.* ¶ 830. The claims therefore do not suffer from the defect identified in *Two-Way Media v. Comcast Cable Commc’ns, LLC*, in which the stated purpose of the invention was to enable a distributed network architecture but the claims did not “sufficiently describe how to achieve” that network in a non-abstract way. 874 F.3d 1329, 1337 (2017).

This case has little in common with the cases Google cites to support its argument that the ’241 consists of “nothing but ‘result-focused, functional’” claim language. Mot. at 17. In fact, every case cited by Google on this point predates the Federal Circuit’s clarification in *Uniloc*.⁷

⁷ See *Two-Way Media*, 874 F.3d at 1337, 1338 (claim recited method “for routing information using result-based functional language” using “only conventional computer components”); *Affinity Labs of Tex., LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1262 (Fed. Cir. 2016) (patent claimed “the general concept of out-of-region delivery of broadcast content through the use of conventional devices”); *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016) (claims included process of “gathering and analyzing information of a specified content, then displaying the results, and not any particular assertedly inventive technology for performing those functions”); *In re TLI Commc’ns LLC Patent Litig.*, 823 F.3d 607, 612 (Fed. Cir. 2016) (claims were “directed to the use of conventional or generic technology in a nascent but well-known environment, without any claim that the invention reflects an inventive solution to any problem presented by combining the two”); *Digitech Image Techs., LLC v. Elecs. for Imaging, Inc.*, 758 F.3d 1344, 1350 (Fed. Cir. 2014) (claimed “device profile” was nothing more than a “collection of intangible color and spatial information”); *Personalized Media Commc’ns, LLC v. Amazon.com, Inc.*, 161 F. Supp. 3d 333 (D. Del. 2015) (claim in PMC patent recited a decryption

FILED UNDER SEAL PURSUANT TO PROTECTIVE ORDER

Rather, as discussed above, the claims are directed to a computer-based process that itself “improves the functionality of a programming distribution network, including its origination, intermediate transmitter, and receiver stations,” Russ Rep. ¶ 830, rendering it not abstract under Step One.⁸

ii. Alice – Step Two

Both the patent specification and expert testimony show that the claims were inventive and not conventional in 1981. Google focuses on the fact that origination stations, intermediate transmitter stations, and receiver stations were “conventional and well-known” at the time. Mot. at 20. That is irrelevant, because the critical focus is not on certain claim elements in isolation, but the elements and steps taken together as an ordered combination. The overwhelming evidence shows that the claims easily satisfy Step Two. The specification alone—which the “Federal Circuit routinely relies on [as] . . . conclusive evidence of inventiveness,” *PPS Data*, 404 F. Supp. at 1040—describes the non-conventional nature and benefits of the invention, including:

- “In the prior art, there have been attempts to develop systems to control programming and systems to monitor programming, but the two have been treated as separate systems, and each has had limited capacity.” ‘490 1:53-57.
- “Such prior art systems and equipment have lacked the capacity to automatically coordinate multi-channel and multi-media presentations.” ‘490 2:22-25.

algorithm used “to convert the encrypted signal into a decrypted signal” and was therefore an abstract mathematical algorithm).

⁸ See *Uniloc*, 957 F.3d at 1308 (distinguishing prior “data manipulation” cases, finding Bluetooth-related claims not abstract because claimed addition of a data field represented a “specific asserted improvement to the functionality of the communication system itself,” and noting that invention’s “compatibility with conventional communication systems does not render it abstract”); *Enfish*, 822 F.3d at 1336 (claims relating to a database were not abstract because their focus was “on an improvement to computer functionality itself”); *Core Wireless*, 880 F.3d at 1363 (claim limitations disclosed a “specific manner of displaying a limited set of information to the user” beyond conventional methods and therefore “recite[d] a specific improvement over prior systems”).

FILED UNDER SEAL PURSUANT TO PROTECTIVE ORDER

- “It is the further purpose of this invention to provide means and methods for the automation of intermediate transmission stations that receive and retransmit programming.” ‘241 8:37-39.
- “It is the further purpose of this invention to provide means and methods to process and monitor such [television] transmissions and presentations at individual receiver sites and to control, in certain ways, the use of transmitted programming and the operation of certain associated equipment.” ‘490 1:42-47.

Dr. Russ further opined that “the claims of the ‘241 Patent were inventive and well beyond the capabilities of conventional origination stations, intermediate transmitter stations, and receiver stations in the early 1980s,” including because:

- “[T]he claims are directed to a computer-based process that greatly improves the functionality of a programming distribution network[.]” Russ Rep. ¶ 830.
- “Conventional origination stations would simply transmit television channels without any signals that would control an intermediate transmitter station or receiver station.” *Id.* ¶ 828; *see* ‘241 291:61-64.
- “Conventional intermediate transmitter stations would not be able to identify what television programming to transmit based on a comparison of stored identification information and an incoming signal.” Russ Rep. ¶ 828; *see* ‘241 291:65-292:1-7.
- “Conventional intermediate transmitter stations would also not send control signals to [a] receiver station.” Russ Rep. ¶ 828; *see* ‘241 292:8-10.
- “Conventional receiver stations would simply receive and display television channels[.]” but not “transfer a portion of a receive[d] control signal to a controllable device to perform a function.” Russ Rep. ¶ 828; *see* ‘241 292:17-19.

Having “offered evidence which creates some uncertainty about” whether the ‘241 claim limitations were “well-understood, routine, and conventional activities previously known in the industry,” summary judgment is precluded.⁹

⁹ *PSS Data*, 404 F. Supp. 3d at 1037, 1038; *see Berkheimer*, 881 F.3d at 1370 (summary judgment for defendant vacated because “there is at least a genuine issue of material fact in light of the specification regarding whether claims 4-7 archive documents in an inventive manner that improves these aspects of the disclosed archival system”); *Bascom*, 827 F.3d at 1350-51 (summary judgment improper because, “construed in favor of the nonmovant[.]” claims reciting a “specific,

FILED UNDER SEAL PURSUANT TO PROTECTIVE ORDER

iii. Google Is Not Entitled to Summary Judgment on the “Other Asserted ’241 Patent Claims”

Google alleges in a single paragraph that all the asserted ’241 claims that it did not analyze are also ineligible. Mot. at 21-22. But Google fails even to correctly identify which dependent claims are asserted. In its statement of facts Google references dependent claims 22-27 and 37-39. Then in its argument, it references Claims 31, 33 through 37, and 39. The actual dependent asserted claims are 23, 31, 33, 34, 36, 37, and 39. *See* Xiong Rep. App’x D. In any event, even if the Court were to find either of the independent claims ineligible, Google fails to identify any summary judgment evidence suggesting that the remaining claims were well-understood, routine, and conventional in 1987 and thus cannot carry its Step Two burden.

CONCLUSION

For the reasons explained above, Google is not entitled to summary judgment on the ’528 and ’241 under § 101. Its motion should be denied.

Dated: July 22, 2020

Respectfully submitted,

By: /s/ Joseph S. Grinstein

Arun Subramanian
New York State Bar No. 4611869
Tamar Lusztig
New York State Bar No. 5125174
Geng Chen
New York State Bar No. 5377262
SUSMAN GODFREY L.L.P.
1301 Avenue of the Americas, 32nd Fl.
New York, NY 10019-6023
Telephone: (212) 336-8330
asubramanian@susmangodfrey.com
tlusztig@susmangodfrey.com
gchen@susmangodfrey.com

discrete implementation” of content filtering “may be read to improve an existing technological process”) (alteration and quotation marks omitted).

FILED UNDER SEAL PURSUANT TO PROTECTIVE ORDER

Joseph S. Grinstein
Texas State Bar No. 24002188
SUSMAN GODFREY L.L.P.
1000 Louisiana, Suite 5100
Houston, TX 77002-5096
Telephone: (713) 653-7820
Fax: (713) 654-6666
jgrinstein@susmangodfrey.com

Meng Xi
SUSMAN GODFREY L.L.P.
1900 Avenue of the Stars, Ste. 1400
Los Angeles, CA 90067
Telephone: (310) 789-3100
Fax: (310) 789-3150
mxi@susmangodfrey.com

Rachel S. Black
SUSMAN GODFREY L.L.P.
1201 Third Avenue, Suite 3800
Seattle, WA 98191
Telephone: (206) 516-3880
Fax: (206) 516-3883
rblack@susmangodfrey.com

S. Calvin Capshaw
Texas Bar No. 03783900
Elizabeth L. DeRieux
Texas Bar No. 05770585
CAPSHAW DERIEUX LLP
114 E. Commerce Avenue
Gladewater, TX 75647
Telephone: (903) 233-4826
ccapshaw@capshawlaw.com
ederieux@capshawlaw.com

Dmitry Kheyfits
New York State Bar No. 4743795
KHEYFITS BELENKY LLP
1140 Avenue of the Americas, 9th Floor
New York, NY 10036
Telephone: (212) 203-5399
dkheyfits@kblit.com

Timothy R. DeWitt (*Pro Hac Vice*)

FILED UNDER SEAL PURSUANT TO PROTECTIVE ORDER

VA Bar No. 40522
24IP LAW GROUP USA, PLLC
424 Fourth Street, Suite C2
Annapolis, MD 21403
Tel.: (410) 212-2539
Fax: (410) 295-5096
tdewitt@24ipusa.com

*Attorneys for Personalized Media
Communications, LLC*

FILED UNDER SEAL PURSUANT TO PROTECTIVE ORDER

CERTIFICATE OF AUTHORIZATION TO FILE UNDER SEAL

I hereby certify that this document is being filed under seal pursuant to the terms of the protective order entered in this case because it contains highly confidential information.

/s/ Tamar Lusztig
Tamar Lusztig

FILED UNDER SEAL PURSUANT TO PROTECTIVE ORDER

CERTIFICATE OF SERVICE

I certify that on July 22, 2020, I electronically served the foregoing on all counsel of record via email.

/s/ Tamar Lusztig
Tamar Lusztig